

PATENT

Atty. Dkt. No. ATT-017PUS (ATT/2000-0074)

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-2 (Canceled)

3. (Currently Amended) ~~The device according to claim 1, further including~~ An optical switch device, comprising:

a switch fabric;

a plurality of input ports through which incoming data contained in a bearer signal passes to the switch fabric, the plurality of input ports to receive the data from a wave division demultiplexer;

a plurality of output ports through which outgoing data passes from the switch fabric to transmit the data to a wave division multiplexer;

a first demultiplexing device coupled to at least one of the plurality of input ports to inject an optical connection verification signal into the switch fabric;

a signal generator coupled to the first demultiplexing device for injecting the connection verification signal into the switch fabric at a frequency that is different from a frequency of the bearer signal;

a first multiplexing device coupled to at least one of the plurality of output ports; and a first signal analyzer coupled to the first multiplexing device for analyzing the connection verification signal injected by the signal generator; and

a second demultiplexing device coupled to at least one of the plurality of input ports and a second signal analyzer coupled to the second demultiplexing device for analyzing data extracted from the input ports on a polling basis.

Claims 4-21 (Canceled)

22. (Currently Amended) ~~The method according to claim 9, further including~~ A method for achieving bit level access to data in an optical switch, comprising:

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coupling a plurality of input ports through which incoming data contained in a bearer signal passes to a switch fabric, the plurality of input ports receiving the data from a wave division demultiplexer;

coupling a plurality of output ports through which outgoing data passes from the switch fabric to transmit the data to a wave division multiplexer;

coupling a first demultiplexing device to at least one of the plurality of input ports to inject an optical connection verification signal into the switch fabric;

coupling a signal generator to the first demultiplexing device for injecting the connection verification signal into the switch fabric at a frequency that is different from a frequency of the bearer signal;

coupling a first multiplexing device to at least one of the plurality of output ports;

coupling a first signal analyzer to the first multiplexing device for analyzing the connection verification signal injected by the signal generator; and

coupling a second demultiplexing device to at least one of the plurality of input ports and a second signal analyzer coupled to the second demultiplexing device for analyzing data extracted from the input ports on a polling basis.

Claims 23-26 (Canceled)